

**EIS Review Comments Spreadsheet
Southdale West Improvements (Pine Valley to Colonel Talbot Road)**

Submitting Consultant Transmittal:

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|---------------|----------------|---------------------|------------------|------------------|
| Review Code: | Document Name: | Natural Environment | Revised By: | Emily McNaughton |
| Designer: | Contract Name: | City of London | Revision Date: | October 23, 2018 |
| % Completion: | Contract No: | 60542198 | Revision Number: | 1 |

| Item No. | Discipline | Reviewer Name | Reviewing Date | Dwg. #/ Spec Section/ Page # | Review Comment | Respondent | Response & Details (Designer) |
|--|---------------|--|----------------|------------------------------------|--|----------------|--|
| Lack of clarity regarding plant species | | | | | | | |
| 1 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 17 | Reviewers found the EIS sensitive species list unclear, relative to the patch numbers and the plant's location within the patches (e.g., North Talbot PSW - Patch 10059 and p 18 patch 10063). It is not clear what construction impacts will be without this information. Recommendation: EIS must clearly state whether the plant SAR SCC are found within our outside the study area and if they will be impacted by construction. - If the plant will be impacted compensatory mitigation will be required. | AECOM | Report will be revised to clarify location of sensitive species for Patch 10063. Sensitive species within patch 10059 are all located outside of communities potentially affected by the proposed works. |
| 2 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 17 | EIS fails to note that ~180 m of new edge will be created. | AECOM | Noted. Report will be updated to note the new edge creation. |
| 3 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 21-22 | EIS does not make clear whether or not the false hop sedge was found within or outside the study area or if it would be impacted by construction. Recommendation: If the plants will be impacted negatively by construction specify what actions will be taken to reduce harm and/or to compensate any loss in the EIS or at Detailed Design. | AECOM | False hop sedge was not identified as part of AECOM's work. It was identified within the wetland evaluation itself. A Detailed plant inventory of the area of impact should be completed at Detailed Design and will be included as a recommendation in the EIS. |
| Invasive Species | | | | | | | |
| 4 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 13 | Phragmites currently exists in the study area. A new 180 m edge will be created along a significant woodland. Reviewers are concerned this will introduce phragmites into the wetlands and Thornicroft Drain. Recommendation: Clean equipment protocol should be implemented | AECOM | Noted, a restoration plan has been recommended as part of detailed design. The EIS will be updated to recommend that a clean equipment protocol be included as part of restoration plan |
| 5 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 13 | Recommendation: Invasive species management plan including monitoring must be included in the project budget and contract documents. | City of London | Noted, an invasive species management plan will be included as part of the recommendation in the EIS to be completed at detailed design. |
| 6 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 13 | Recommendation: Detailed design must include new edge mitigation recommendations. | AECOM | A recommendation for the Creation of an Edge Management Plan is provided in the EIS, Section 6. |
| Barn Swallows | | | | | | | |
| 7 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 44 | Barn swallow flyovers were noted but suitable habitat was only noted in the barn. Duggan found barn swallows nesting in the culvert in a similar report. Recommendation: - AECOM to revisit the culvert associated with the Storm Water Management Facility within Southwest Optimist Park for evidence of barn swallows nesting. If found, alternative nesting kiosks must be included in the project. | AECOM | Inspection of the culverts should be undertaken at Detailed Design stage. |
| Culvert related to Thornicroft Drain | | | | | | | |
| 8 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 12 | "[t]he culvert under Southdale Road creates a permanent barrier to fish passage as the upstream section appears to be buried". EEAC wonders if AECOM investigated to determine if this was the case. A plan must be created to address the fish living in Thornicroft Drain. Recommendation: Works impacting Thornicroft Drain must avoid downstream damage and erosion. | AECOM | AECOM did investigate the length of Thornicroft drain upstream of Southdale Road and observed that it is completely piped and flows under a subdivision. Downstream of Southdale Road is open and is considered fish habitat. The culvert extends beyond the limits of the road right of way with a concrete splash pad at the outlet of the culvert on the downstream side. An extension of the culvert will need to be reviewed as part of final design and impacts to fish habitat will need to be reviewed as part of the Detailed Design works. |

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| 9 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 12 | Recommendation: The City of London's storm sewers are causing high flows in the Thornicroft Drain and high turbidity. It is recommended that the City is obligated to fix the submerged culvert prior to the road expansion and other development projects in the area. If not completed prior to the road expansion, funding to reduce or eliminate erosive flows must be included in the contract documents. | The City of London | |
| Loss of Wetlands | | | | | | | |
| 10 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | n/a | Based on bird activity, the small wetland south of Southdale is providing an ecosystem function. The wetland is to be protected (a), regardless of size. If not achievable, (b) disturbance must be ensure that the North Talbot PSW is not adversely affected. | AECOM | All efforts to minimize impacts to wetland communties within the study area are being considered throughout the design process. |
| 11 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | n/a | Recommendation: The City of London should ensure that the flow of water into the small wetland is maintained. | The City of London | |
| 12 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | n/a | Recommendation: c) the road project will include sufficient budget to compensate for the loss of wetland throughout creation of a wetland of at least 4 ha elsewhere close to the disturbance site. | The City of London | |
| Meadowlark Habitat | | | | | | | |
| 13 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 70 | This project will result in the loss of 1.3 hectares of Meadowlark habitat. Consequently, a minimum of 4 hectares of replacement habitat is required according to the consultant who spoke at the August EEPAC meeting. The report makes mention on p. 70 of the creation of a Habitat Management Plan for the Meadowlark but one does not currently exist. The reviewers also take exception to the rating of "low-no effect" regarding the removal of SAR habitat on p. 70. | AECOM | This Habitat Management Plan will be completed at Detailed Design. This is completed in conjunction with the Notice of Activity (NOA). The Low-no negative effect rating was assigned as the quality of the habitat that will be created as part of the NOA will be of greater quality than what is currently being removed. Typically the edges of roads are not considered quality habitat and Meadowlarks are known to avoid them. |
| 14 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 70 | Recommendation: The City should begin purchasing land in and around the southwest to offset the loss of habitat for species like the Meadowlark using money from either development charges or infrastructure projects, outside the growth boundary, west of Colonel Talbot and south of Southdale which would enlarge the close to development project to protect significant woodland, significant valley land and cultural meadows. | The City of London AECOM to provide recommendations on appropriate habitat as additional scope upon request. | |
| 15 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 70 | Recommendation: No construction works or removal of habitat should occur before a Habitat Management Plan is submitted as part of the permitting process for this project. EEPAC would appreciate the opportunity to be involved in the creation of this plan. (Based on the GRCA 20-year plan, requiring a 5 year monitoring period after the implementation of a habitat management plan. | The City of London | |

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| Species and Habitat Management Plan | | | | | | | |
| 16 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | n/a | Southwest London is currently experiencing rapid development. Three development projects -- road widening, community center and housing development -- are completed or currently expected to occur in the near future. Significant areas (meadowland, woodland and wetland) will be affected, either directly (due to loss as a result of land conversion) or indirectly (through increased particulate pollution, noise pollution and light pollution). Significant valley lands will be heavily impacted around Southdale. Recommendation: The City of London should take a holistic, integrated approach to determine which areas would be beneficial to preserve. | The City of London | |
| 17 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | n/a | Recommendation: A Habitat Management Plan for SAR birds must be created prior to the start of construction on the new road and approved by the Ministry prior to road construction. | The City of London | To be completed at Detailed Design |
| 18 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | n/a | Recommendation: The City should begin purchasing land in and around the southwest to offset the loss of habitat for species like the Meadowlark. These lands could become a future ESA or an enlargement to the Lower Dingman ESA. A 20-year management plan for this area should be considered. | The City of London | |
| 19 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | n/a | Recommendation: The City should acquire and create wildlife corridors to connect bird species (and other species) inhabiting that region to the various valley lands, wetlands and meadow lands in the area. | The City of London | |
| Final Queries | | | | | | | |
| 20 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 69-70 | The report makes mention of "integrated restoration plantings". We would like to know what exactly is meant by this phrase. Recommendation: Replacement species are native to south western Ontario (red maple, sugar maple) with a variety of species. | AECOM | A planting plan will be created at Detailed design and will include the use of native species only. |
| 21 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | n/a | According to this EIS, there are no cavity trees within the ROW, but there is possibility of cavity trees within the woodland. Recommendation: Vegetation removal should occur outside of bat roosting season. Any cavity trees found during construction should be retained with a buffer applied. | AECOM | In areas surrounding natural features, the tree removal timing window should be amended to include the bat roosting period. |
| 22 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 38 Figure 5 | What is the rationale for one amphibian monitoring station near the North Talbot PSW and two near the small wetland south of Southdale. Findings seem contrary to previous studies in the area. Recommendation: New amphibian surveys may be necessary to establish their level of presence in the affected area. | AECOM | Station 7 & Station 8 are located within the Talbot PSW. Initial Station locations were identified through aerial photography interpretation and then refined in the field based on the available habitat resulting in some locations being removed or eliminated as suitable conditions were not present. |
| 23 | Environmental | C. Dyck, P. Ferguson, S. Levin, R. Trudeau | 10-Sep-18 | p. 58 | EEPAC wishes to be engaged during the Detailed Design Process. | City of London | |